

DJ-Silicone product data

NE71 Series

Common silicone rubber for molding&extrusion has excellent high and low temperature resistance, electrical performance, and physical and mechanical properties. Despite of slightly worse transparency than general silicone rubber, it is more suitable for manufacturing colored products.

There are two kinds of this product, namely modifying silicone rubber for molding and modifying silicone rubber for extrusion. The former can be vulcanized by DMDBH and used for manufacturing industrial accessories like keypad, seal ring and seal pad etc, while the latter can be vulcanized by DCBP and used for manufacturing wire, cable, rubber tube and rubber strip etc.

Common Silicone Rubber for Molding

| Data \ Type | NE-7125 | NE-7130 | NE-7140 | NE-7150 | NE-7160 | NE-7170 | NE-7180 | NE-7190 |
|------------------------------|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Appearance | milky-white, slightly yellow, no obvious extraneous matter | | | | | | | |
| Density , g/cm ³ | 1.05±0.05 | 1.08±0.05 | 1.13±0.05 | 1.15±0.05 | 1.19±0.05 | 1.22±0.05 | 1.25±0.05 | 1.26±0.05 |
| Hardness , Shore A | 25±3 | 30±3 | 40±3 | 50±3 | 60±3 | 70±3 | 80±3 | 86±2 |
| Tensile Strength , MPa ≥ | 3.5 | 5.0 | 6.5 | 7.5 | | 7.0 | | 4 |
| Elongation at Breakage , % ≥ | 700 | 450 | 400 | 320 | 280 | 200 | 150 | 80 |
| Tension Set , % ≤ | 8 | 7 | | 8 | | 7 | 6 | 6 |
| Tear Strength , kN/m ≥ | 10 | 15 | 16 | 18 | | 17 | 16 | 10 |

First vulcanization condition for test piece: 175°C×5min, Vulcanizator: 80% DMDBH,quantity added 0.65%.

Common Silicone Rubber for Extrusion

| Data \ Type | NE-7240 | NE-7250 | NE-7260 | NE-7270 | NE-7280 |
|-------------------------------|--|-----------|-----------|-----------|-----------|
| Appearance | milky-white, slightly yellow, no obvious extraneous matter | | | | |
| Density, g/cm ³ | 1.13±0.05 | 1.18±0.05 | 1.20±0.05 | 1.22±0.05 | 1.25±0.05 |
| Hardness , Shore A | 40±2 | 50±3 | 60±3 | 70±3 | 80±3 |
| Tensile Strength , MPa ≥ | 6.5 | 7.5 | | 7.0 | 6.5 |
| Elongation at Breakage , % ≥ | 450 | | 360 | 250 | 150 |
| Tension Set , % ≤ | 14 | | | | 10 |
| Tear Strength , kN/m ≥ | 16 | 18 | 20 | | 18 |
| Volume Resistivity, Ω·cm ≥ | 1.0×10 ¹⁴ | | | | |
| Dielectric Strength , kV/mm ≥ | 18 | | | | |

Physical and Mechanical Properties are based on first vulcanization data,Electrical Properties are drawn from second vulcanization data.

first vulcanizationcondition for test piece: 175°C×5min

Second vulcanizationcondition for test piece: 200°C×2h

Vulcanizator: 80% DMDBH,quantity added 0.65%

NE91 Series

Character: Excellent physical properties, anti-yellowing performance, and good processability

Application: NE-91 is suitable for molding application with higher transparency requirements.

E.g. keypad, sanitation commodity for living, O-ring, seal ring (parts for industrial use)

NE-91 Series

| Item | Data Type | | NE-9130 | NE-9140 | NE-9150 | NE-9160 | NE-9170 | NE-9180 | NE-9190 | |
|----------------------------|------------|---|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| | Appearance | Translucent, no obvious extraneous matter | | | | | | | | |
| Density, g/cm ³ | | | 1.07±0.04 | 1.13±0.04 | 1.15±0.04 | 1.18±0.04 | 1.22±0.04 | 1.25±0.04 | 1.26±0.05 | |
| Hardness, Shore A | | | 30±2 | 40±2 | 50±2 | 60±2 | 70±2 | 80±2 | 86±2 | |
| Tensile Strength, MPa | ≥ | | 8.0 | | 8.5 | | 8.0 | | 6.0 | |
| Elongation at Breakage, % | ≥ | | 700 | 600 | 500 | 400 | 300 | 200 | 120 | |
| Tension Set, % | ≤ | | 8 | | | | | | 6 | |
| Tear Strength, kN/m | ≥ | | 15 | 20 | 25 | | | 20 | 10 | |
| Volume Resistivity, Ω·cm | ≥ | | 1×10 ¹⁵ | | | | | | | |
| Dielectric Strength, kV/mm | ≥ | | 20 | | | | | | | |
| Linear Shrinkage rate, % | | | 3.1~3.7 | 3.0~3.6 | 2.9~3.4 | 2.8~3.3 | 2.6~3.2 | 2.4~3.0 | 2.4~3.0 | |

Physical and Mechanical Properties are based on the first vulcanization data, Electrical Properties are drawn from the second vulcanization data.

The first vulcanization condition for test piece: 175°C×5min; The second vulcanization condition for test piece: 200°C×2h

Vulcanizator: Liquid DMDBH, quantity added 0.65%

NE93 Series

Character: High tear strength

Application: NE-93 is suitable for products with special tear strength requirements.

E.g. complicated bake wares, cell phone cover

NE-93 Series

| Type Item | Data | NE-9330 | NE-9340 | NE-9350 | NE-9360 | NE-9370 | NE-9380 |
|------------------------------|---|--------------------|---------------|---------------|---------------|---------------|---------------|
| Appearance | Translucent, no obvious extraneous matter | | | | | | |
| Density, g/cm ³ | | 1.07± 0.04 | 1.13± 0.04 | 1.15± 0.04 | 1.18± 0.04 | 1.22± 0.04 | 1.25± 0.04 |
| Hardness, Shore A | | 32±2 | 40±2 | 50±2 | 60±2 | 70±2 | 80±2 |
| Tensile Strength, MPa ≥ | | 8.0 | 9.0 | | 8.5 | | 8.0 |
| Elongation at Breakage, % ≥ | | 700 | 600 | 500 | 400 | 300 | 200 |
| Tension Set, % ≤ | | 8 | | | 10 | | 8 |
| Tear Strength, kN/m ≥ | | 20 | 35 | 40 | | 20 | |
| Volume Resistivity, Ω·cm ≥ | | 1×10 ¹⁵ | | | | | |
| Dielectric Strength, kV/mm ≥ | | 20 | | | | | |
| Linear Shrinkage rate, % | | 3.2~3.7 | 3.0~3.6 | 2.9~3.4 | 2.8~3.4 | 2.6~3.2 | 2.4~3.0 |

Physical and Mechanical Properties are based on the first vulcanization data, Electrical Properties are drawn from the second vulcanization data.

The first vulcanization condition for test piece: 175°C×5min; The second vulcanization condition for test piece: 200°C×2h

Vulcanizator: Liquid DMBH, quantity added 0.65%

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